



Docket No.: D-1529
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Patent Application of:
Takeshi KURIMOTO et al.

Application No.: 10/690,748

Group Art Unit: 3616

Filed: October 23, 2003

Examiner: D.J. Brown

For: AIRBAG SYSTEM

APPEAL BRIEF UNDER 37 CFR § 41.37

April 21, 2006

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

This Appeal Brief is filed pursuant to 37 CFR § 41.37. A credit card authorization form in the amount of \$500.00 is attached herewith for the Brief fee.

04/24/2006 SZEWDIE1 00000031 10690748
01 FC:1402

500.00 OP

REAL PARTY IN INTEREST

The real party in interest is Assignee Takata Corporation.

RELATED APPEALS AND INTERFERENCES

Appellants, Appellants' representative, and the Assignee of this application are aware of no other appeals or interferences that will directly affect, or be directly affected by, or have a bearing on, the Board's decision in the pending appeal.

STATUS OF CLAIMS

This is an appeal from the final rejection of claims 1-9 as presented in the Office Action of January 13, 2006.

Claims 1-9 are pending in the application. Each of claims 1-9 stands rejected, and the rejection of each of claims 1-9 is appealed.

Claims 1-9 on appeal are set forth in their entirety in the Claims Appendix attached hereto.

STATUS OF AMENDMENTS

Each of the claim amendments presented in Appellants' Amendment filed November 28, 2005, in response to the Office Action of August 30, 2005, has been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

The claimed invention relates to an airbag system for protecting an occupant of a vehicle, such as an automobile, in the event of a crash. More particularly, the present invention relates to an airbag system including an airbag having an interior partitioned into a plurality of chambers (specification page 1, lines 5-9).

The claimed invention overcomes problems associated with conventional airbag systems. For example, in one conventional side airbag system, the discharge ports are directed forward of the seat. Accordingly, gas from the gas generator first inflates the airbag forward of the seat and then inflates the airbag vertically, so that the airbag is inflated vertically later (specification page 2, lines 10-16).

Accordingly, it is an object of the claimed invention to provide an airbag system having an airbag that can be quickly inflated in a vertical orientation, and an airbag system that is both structurally simple and economical (specification page 2, lines 17-22).

The invention as defined in claim 1 is directed to an airbag system for protecting an occupant (specification page 5, lines 12-19; see, e.g., Fig. 1 and Fig. 2(a)). The system includes an airbag 1 having an occupant side surface 1p facing the occupant and an opposite side surface 1q opposite to the occupant side surface when the airbag is inflated. The airbag 1 has an interior partitioned into a plurality of chambers including at least an upper chamber 1b and a lower chamber 1a (specification page 2, line 27, through page 3, line 7; Fig. 2(a)).

The system includes a gas generator 3 disposed in the airbag for generating gas to inflate the airbag (specification page 6, lines 11-18; Fig. 2(a)).

The system also includes a gas distributor disposed in the airbag and partly surrounding the gas generator 3. The gas distributor has a discharge port 4a, 4b for discharging the gas from the gas generator into at least the upper chamber 1b and the lower chamber 1a so as to expand the airbag. The gas distributor has a size greater than that of the gas generator 3

to form a clearance for a gas passage outside the gas generator so that the gas flows between at least the upper chamber 1b and the lower chamber 1a through the clearance (specification page 6, lines 19-28, and page 7, lines 16-25; Fig. 2(a)).

The airbag has a connecting line 2 having a first section 2a and a second section 2b extending continuously from the first section to define at least the upper chamber 1b, the lower chamber 1a and the gas distributor, with the connecting line 2 connecting the occupant side surface 1p and the opposite side surface 1q of the airbag (specification page 6, lines 5-10; Fig. 2(a)).

In the airbag system defined in claim 2, the airbag 1 includes a housing chamber 4 as the gas distributor between the second section of the connecting line 2 and a rear side rim of the airbag for retaining the gas generator 3. The discharge ports include a lower discharge port 4a communicating with the lower chamber 1a at a lower side of the housing chamber, and an upper discharge port 4b communicating with the upper chamber 1b at an upper side of the housing chamber, with the lower discharge port 4a having a size larger than that of the upper discharge port 4b (specification page 6, line 5, through page 7, line 17; Fig. 2(a)).

In the airbag system defined in claim 3, the gas generator 3 has a rod shape having a gas port 3b facing downwardly at one end thereof and disposed vertically in the housing chamber 4 (specification page 6, lines 11-14; Fig. 2(a)).

In the airbag system defined in claim 4, the housing chamber 4 is disposed between the upper chamber 1b and the rear side rim of the airbag (specification page 6, lines 7-9; Fig. 2(a)).

In the airbag system defined in claim 5, the connecting line 2 has a lower part 2a situated close to the rear side rim of the airbag (specification page 8, lines 1-8; Fig. 3(a)).

In the airbag system defined in claim 6, the airbag is partitioned by the connecting line first section 2a connecting the occupant side surface 1p and the opposite side surface 1q, with the connecting line first section 2a extending to the connecting line second section 2b (specification page 5, line 29, through page 6, line 4; Fig. 2(a)).

In the airbag system defined in claim 7, the connecting line first section 2a extends from a front side rim of the airbag to an end portion near the rear side rim, and the connecting line second section 2b extends from the end portion of the connecting line first section 2a upwardly to end near an upper side rim of the airbag (specification page 5, line 28, through page 6, line 10; Fig. 2(a)).

The airbag system defined in claim 8 further includes a partitioning line 6 disposed above the connecting line first section 2a so as to form a middle chamber 1c between the upper chamber 1b and the lower chamber 1a (specification page 8, line 24, through page 9, line 3; Fig. 4(b)).

With the claimed airbag system, the gas distributor is constructed by connecting the occupant side surface and the opposite side surface of the airbag. Accordingly, it is not necessary to provide a separate gas distributor, thereby making the airbag system simple and easy to produce (specification page 3, lines 8-12).

Furthermore, because the housing chamber 4 can extend vertically along the side rim of the airbag, the gas generator

inflates the housing chamber so as to quickly deploy the airbag vertically upward (specification page 4, lines 7-9).

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

35 U.S.C. § 102(b) - Makoto

The first issue for review is whether claims 1 and 9 are unpatentable under 35 U.S.C. § 102(b) over JP 2000-085515 (hereinafter "Makoto").

The Office Action asserts that Makoto discloses (with reference to Makoto's Fig. 1) an airbag having "[a] connecting line (line separating chambers 11, 12, and 14) [that] has a first section (horizontal portion of line between upper chamber 12 and lower chamber 11) and a second section (vertical portion of line between chamber 14 and upper 12 and lower 11 chambers) extending continuously from the first section to define at least the upper chamber, the lower chamber and the gas distributor, wherein the connecting line connects the occupant side surface and the opposite side surface of the airbag" (Office Action page 2, numbered paragraph 2).

The Office Action also asserts that Makoto discloses (with reference to Makoto's Fig. 3) an airbag having "[a] connecting line (line separating chambers 11, 12, and 14) [that] has a first section (horizontal portion of line between upper chamber 12 and lower chamber 11) and a second section (diagonal portion of line between chamber 13 and upper chamber 12) extending continuously from the first section to define at least the upper chamber, the lower chamber and the gas distributor, wherein the connecting line connects the occupant side surface and the opposite side surface of the airbag" (Office Action pages 2-3, numbered paragraph 2).

35 U.S.C. § 103(a) - Makoto in view of Acker

The second issue for review is whether claims 2 and 5 are unpatentable under 35 U.S.C. § 103(a) over Makoto in view of U.S. Patent No. 6,349,964 to Acker et al. ("Acker").

The Office Action acknowledges that Makoto "does not disclose that the lower discharge port is larger than that of the upper discharge port" (Office Action page 4, numbered paragraph 4).

The Office Action asserts that Acker "does disclose that the lower discharge ports 44 are larger than the upper discharge ports 42" (Office Action page 4, numbered paragraph 4).

The Office Action concludes that "it would have been obvious . . . to modify Makoto with the teachings of Acker et al. to have larger lower discharge ports so the lower chamber has a higher pressure applied to the pelvic region of the occupant" (Office Action page 4, numbered paragraph 4).

35 U.S.C. § 103(a) - Makoto in view of Acker, and further in view of Yokoyama

The third issue for review is whether claims 3, 4, 6, and 7 are unpatentable under 35 U.S.C. § 103(a) over Makoto in view of Acker, and further in view of U.S. Patent No. 6,231,069 to Yokoyama.

The Office Action acknowledges that Makoto "does not disclose that the gas generator has a gas port facing downwardly at one end" (Office Action page 4, numbered paragraph 5).

The Office Action asserts that Yokoyama "does disclose a wall 17 that directs the gas from the gas generator downwardly" (Office Action page 4, numbered paragraph 5).

The Office Action concludes that "it would have been obvious . . . to further modify the invention of Makoto as modified by

Acker et al. with the teachings of Yokoyama to utilize a wall at the lower end of the housing chamber attached to the gas generator in order to direct the gas downwardly into the lower chamber to fill the center of the lower chamber first" (Office Action page 4, numbered paragraph 5).

35 U.S.C. § 103(a) - Makoto in view of Acker, and further in view of Yokoyama and Sunabashiri

The fourth issue for review is whether claim 8 is unpatentable under 35 U.S.C. § 103(a) over Makoto in view of Acker, and further in view of Yokoyama and U.S. Patent No. 6,561,539 to Sunabashiri et al. ("Sunabashiri").

The Office Action acknowledges that the combination of Makoto, Acker, and Yokoyama "does not disclose that a partitioning line is disposed above the connecting line first section so as to form a middle chamber between the upper chamber and the lower chamber" (Office Action page 5, numbered paragraph 6).

The Office Action asserts that Sunabashiri "does disclose a partitioning line 8 that forms a middle chamber between the upper chamber and the lower chamber" (Office Action page 5, numbered paragraph 6).

The Office Action concludes that "it would have been obvious . . . to further modify the combination of Makoto in view of the teachings of Sunabashiri to have a partitioning line disposed above the connecting line first portion in order further control the inflation of the airbag to provide optimal protection for the occupant" (Office Action page 5, numbered paragraph 6).

ARGUMENT

35 U.S.C. § 102(b) - Makoto

Claims 1 and 9

The rejection of claims 1 and 9 under § 102(b) is in error because the disclosure of Makoto does not meet, *inter alia*, Appellants' claimed airbag system connecting line limitations. The disclosure of Makoto does not, therefore, anticipate Appellants' claimed invention.

For at least the following reasons, the disclosure of Makoto does not anticipate Appellants' claimed airbag system.

Appellants' claimed airbag system, with its gas distributor and connecting line, is structurally different from both the embodiment of the side air bag device depicted in Makoto's Fig. 1, and the embodiment depicted in Makoto's Fig. 3.

Appellants' claim 1 defines an airbag system that includes a gas distributor and a connecting line. The gas distributor is disposed in the airbag and partly surrounds the gas generator. The gas distributor has a size greater than that of the gas generator to form a clearance for a gas passage outside the gas generator so that the gas flows between at least the upper chamber and the lower chamber through the clearance.

The connecting line has a first section and a second section *extending continuously* from the first section to define at least the upper chamber, the lower chamber and the gas distributor. The connecting line connects the occupant side surface and the opposite side surface of the airbag.

See Appellants' Fig. 2(a), which illustrates the gas distributor and connecting line 2 having first section 2a and second section 2b.

Makoto's side air bag device is structurally different from Appellants' claimed airbag system. As is evident from Makoto's Figs. 1 and 2, in addition to the line separating lower chamber 11, upper chamber 12, and front duct 14, there are at least two more

lines that form "rear duct 13." As disclosed in the English-language translation of the abstract, "[a] rear duct 13 stretched obliquely upward is formed up at the rear side of a car body of the upper bag chamber 12 so as to allow gas generated by the inflator 20 to be fed upward." See in particular the illustration of rear duct 13 in Makoto's Fig. 2.

Appellants' claimed airbag system is also structurally different from the embodiment of the side air bag device depicted in Makoto's Fig. 3. As indicated above, with regard to the Fig. 3 embodiment, the Office Action asserts that "[a] connecting line (line separating chambers 11, 12, and 14) [that] has a first section (horizontal portion of line between upper chamber 12 and lower chamber 11) and a second section (diagonal portion of line between chamber 13 and upper chamber 12) extending continuously from the first section to define at least the upper chamber, the lower chamber and the gas distributor, wherein the connecting line connects the occupant side surface and the opposite side surface of the airbag."

The examiner's assertion is in error. The side air bag device depicted in Makoto's Fig. 3 does not have a connecting line with a first section and a second section that extends continuously to define at least the upper chamber, the lower chamber and the gas distributor. As is evident from examination of Makoto's Fig. 3, in addition to the line that separates lower chamber 11, upper chamber 12, and front duct 14, and that then extends diagonally upward to form one side of the rear duct 13, there is at least one more diagonal line that is needed to form the *other* side of rear duct 13.

Further, it is defined in claim 1 that the gas distributor has a size greater than that of the gas generator *to form a clearance for a gas passage outside the gas generator so that*

the gas flows between at least the upper chamber and the lower chamber through the clearance. In Fig. 1 of Makoto, gas from the inflator 20 is directly supplied to the lower and upper chambers 11, 12 without providing a clearance for a gas passage as defined in claim 1 of the invention.

With regard to claim 1, therefore, Makoto does not meet, *inter alia*, Appellants' claimed airbag system connecting line limitations.

Since Makoto does not describe each limitation of the claimed invention, Makoto does not anticipate the invention defined by Appellants' claim 1.

35 U.S.C. § 103(a) - Makoto in view of Acker

The rejection of claims 2 and 5 under § 103(a) is in error because the combined disclosures of Makoto and Acker would not have rendered obvious the airbag system defined by either of claims 2 and 5.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

Furthermore, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.

In addition, all of the claim limitations must be taught or suggested by the prior art.

Finally, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the

teachings of the prior art so that the claimed invention is rendered obvious.

Claim 2

As summarized above (in the Grounds of Rejection to be Reviewed on Appeal section), the Office Action asserts that "it would have been obvious . . . to modify Makoto with the teachings of Acker et al. to have larger lower discharge ports so the lower chamber has a higher pressure applied to the pelvic region of the occupant."

For reasons analogous to those identified above with respect to the rejection of claims 1 (and 9) under § 102(b), the rejection of claim 2 is also in error. Dependent claim 2, which depends from claim 1, is allowable along with claim 1, and on its own merits.

Claim 2 adds the limitation that "said airbag includes a housing chamber as the gas distributor between the second section of the connecting line and a rear side rim of the airbag for retaining the gas generator, said discharge port including a lower discharge port communicating with the lower chamber at a lower side of the housing chamber and an upper discharge port communicating with the upper chamber at an upper side of the housing chamber, said lower discharge port having a size larger than that of the upper discharge port."

First, the rejection is in error because there is no suggestion or motivation in either Makoto or Acker that would have led one to select the references and combine them in a way that would produce the invention defined by claim 2.

Secondly, the rejection is in error because the combined disclosures of Makoto and Acker do not teach or suggest all of Appellants' claim limitations. Regardless of what Acker may

disclose with regard to the relative sizes of the lower and upper discharge ports, the airbag system defined by Appellants' claim 2 would not have been obvious because the disclosure of Acker does not rectify the above-described deficiencies of Makoto.

Thirdly, the grounds of rejection constitute an improper reconstruction of Appellants' claimed invention. As indicated above, there is no suggestion or motivation in either Makoto or Acker that would have led one to select the references and combine them in a way that would produce the invention defined by claim 2. Therefore, the only possible manner in which the examiner could have arrived at his proposed modification is through an improper reconstruction. The examiner's modification is the result of impermissible hindsight derived from first having read Appellants' specification, and is an improper reconstruction of the claimed invention using Appellant's own disclosure as a roadmap for selectively combining the applied prior art references.

Claim 5

For reasons analogous to those identified above with respect to the rejection of claim 2, the rejection of claim 5 is also in error.

Dependent claim 5, which depends from claim 2, is allowable along with claims 1 and 2, and on its own merits.

Claim 5 adds the limitation that "said connecting line has a lower part situated close to the rear side rim of the airbag."

The rejection is in error because the combined disclosures of Makoto and Acker do not teach or suggest all of Appellants' claim 5 limitations. Regardless of what Acker may disclose with regard to the relative sizes of the lower and upper discharge ports, the airbag system defined by Appellants' claim 5 would

not have been obvious because the disclosure of Acker does not rectify the above-described deficiencies of Makoto.

Appellants submit, therefore, that the grounds of rejection presented in the final Office Action fail to establish a *prima facie* case of obviousness with respect to each of claims 2 and 5.

35 U.S.C. § 103(a) - Makoto in view of Acker, and further in view of Yokoyama

The rejection of claims 3, 4, 6, and 7 under § 103(a) is in error because the combined disclosures of Makoto, Acker, and Yokoyama would not have rendered obvious the airbag system defined by any of claims 3, 4, 6, and 7.

Claim 3

As summarized above, the Office Action asserts that "it would have been obvious . . . to further modify the invention of Makoto as modified by Acker et al. with the teachings of Yokoyama to utilize a wall at the lower end of the housing chamber attached to the gas generator in order to direct the gas downwardly into the lower chamber to fill the center of the lower chamber first."

For reasons analogous to those identified above with respect to the rejection of claims 2 and 5 under § 103(a), the rejection of claim 3 is also in error. Dependent claim 3, which depends from claim 2, is allowable along with claims 1 and 2, and on its own merits.

Claim 3 adds the limitation that "said gas generator has a rod shape having a gas port facing downwardly at one end thereof and disposed vertically in the housing chamber."

The rejection is in error because the combined disclosures of Makoto, Acker, and Yokoyama do not teach or suggest all of Appellants' claim 3 limitations.

First, Appellants' claimed system employs the rod-shaped gas generator with the gas port facing downwardly, and the housing chamber, to direct the gas, not the wall disclosed by Yokoyama.

Furthermore, regardless of what Yokoyama may disclose with regard to a wall, the airbag system defined by Appellants' claim 3 would not have been obvious because the disclosures of Acker and Yokoyama do not rectify the above-described deficiencies of Makoto.

Claim 4

For reasons analogous to those identified above with respect to the rejection of claim 3 under § 103(a), the rejection of claim 4 is also in error. Dependent claim 4, which depends from claim 3, is allowable along with claims 1-3, and on its own merits.

Claim 4 adds the limitation that "said housing chamber is disposed between the upper chamber and the rear side rim of the airbag."

The rejection is in error because the combined disclosures of Makoto, Acker, and Yokoyama do not teach or suggest all of Appellants' claim 4 limitations. Regardless of what Yokoyama may disclose with regard to a wall, the airbag system defined by Appellants' claim 4 would not have been obvious because the disclosures of Acker and Yokoyama do not rectify the above-described deficiencies of Makoto.

Claim 6

For reasons analogous to those identified above with respect to the rejection of claims 3 and 4 under § 103(a), the rejection

of claim 6 is also in error. Dependent claim 6, which depends from claim 3, is allowable along with claims 1-3, and on its own merits.

Claim 6 adds the limitation that "said airbag is partitioned by said connecting line first section connecting the occupant side surface and the opposite side surface, said connecting line first section extending to said connecting line second section."

The rejection is in error because the combined disclosures of Makoto, Acker, and Yokoyama do not teach or suggest all of Appellants' claim 6 limitations. Regardless of what Yokoyama may disclose with regard to a wall, the airbag system defined by Appellants' claim 6 would not have been obvious because the disclosures of Acker and Yokoyama do not rectify the above-described deficiencies of Makoto.

Claim 7

For reasons analogous to those identified above with respect to the rejection of claims 3, 4, and 6 under § 103(a), the rejection of claim 7 is also in error. Dependent claim 7, which depends from claim 6, is allowable along with claims 1-3 and 6, and on its own merits.

Claim 7 adds the limitation that "said connecting line first section extends from a front side rim of the airbag to an end portion near the rear side rim, and said connecting line second section extends from said end portion of said connecting line first section upwardly to end near an upper side rim of the airbag."

The rejection is in error because the combined disclosures of Makoto, Acker, and Yokoyama do not teach or suggest all of Appellants' claim 7 limitations. Regardless of what Yokoyama may disclose with regard to a wall, the airbag system defined by

Appellants' claim 7 would not have been obvious because the disclosures of Acker and Yokoyama do not rectify the above-described deficiencies of Makoto.

Appellants submit, therefore, that the grounds of rejection presented in the final Office Action fail to establish a *prima facie* case of obviousness with respect to each of claims 3, 4, 6, and 7.

35 U.S.C. § 103(a) - Makoto in view of Acker, and further in view of Yokoyama and Sunabashiri

The rejection of claim 8 under § 103(a) is in error because the combined disclosures of Makoto, Acker, Yokoyama, and Sunabashiri would not have rendered obvious the airbag system defined by claim 8.

Claim 8

As summarized above, the Office Action asserts that "it would have been obvious . . . to further modify the combination of Makoto in view of the teachings of Sunabashiri to have a partitioning line disposed above the connecting line first portion in order further control the inflation of the airbag to provide optimal protection for the occupant."

For reasons analogous to those identified above with respect to the rejection of claims 2 and 5, and 3, 4, 6, and 7, under § 103(a), the rejection of claim 8 is also in error. Dependent claim 8, which depends from claim 7, is allowable along with claims 1, 2, 3, 6, and 7, and on its own merits.

Claim 8 adds the limitation that the system "further compris[es] a partitioning line disposed above said connecting line first section so as to form a middle chamber between said upper chamber and said lower chamber."

The rejection is in error because the combined disclosures of Makoto, Acker, Yokoyama, and Sunabashiri do not teach or suggest all of Appellants' claim 8 limitations.

First, Appellants' claimed partitioning line is structurally different from Sunabashiri's partitioning wall cloth 6 (compare, e.g., the partitioning line depicted in Appellants' Figs. 4(a) and 4(b) with the wall cloth depicted in Sunabashiri's Fig. 1).

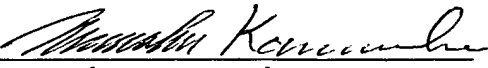
Furthermore, regardless of what Sunabashiri may disclose with regard to a wall cloth, the airbag system defined by Appellants' claim 8 would not have been obvious because the disclosures of Acker, Yokoyama, and Sunabashiri do not rectify the above-described deficiencies of Makoto.

Appellants submit, therefore, that the grounds of rejection presented in the final Office Action fail to establish a *prima facie* case of obviousness with respect to claim 8.

Appellants respectfully submit that each of the final rejections presented in the Office Action is in error, and request that each of the final rejections be reversed.

Respectfully submitted,

HAUPTMAN KANESAKA BERNER
PATENT AGENTS, LLP

By 
Manabu Kanesaka
Reg. No. 31,467
Agent for Appellants

1700 Diagonal Road, Suite 310
Alexandria, VA 22314
(703) 519-9785

CLAIMS APPENDIX

1. An airbag system for protecting an occupant, comprising:

an airbag having an occupant side surface facing the occupant and an opposite side surface opposite to the occupant side surface when the airbag is inflated, said airbag having an interior partitioned into a plurality of chambers including at least an upper chamber and a lower chamber,

a gas generator disposed in the airbag for generating gas to inflate the airbag,

a gas distributor disposed in the airbag and partly surrounding the gas generator, said gas distributor having a discharge port for discharging the gas from the gas generator into at least the upper chamber and the lower chamber so as to expand the airbag, said gas distributor having a size greater than that of the gas generator to form a clearance for a gas passage outside the gas generator so that the gas flows between at least the upper chamber and the lower chamber through the clearance, and

a connecting line having a first section and a second section extending continuously from the first section to define at least said upper chamber, said lower chamber and said gas distributor, said connecting line connecting the occupant side surface and the opposite side surface of the airbag.

2. An airbag system according to claim 1, wherein said airbag includes a housing chamber as the gas distributor between the second section of the connecting line and a rear side rim of the airbag for retaining the gas generator, said discharge port including a lower discharge port communicating with the lower chamber at a lower side of the housing chamber and an upper discharge port communicating with the upper chamber at an upper

side of the housing chamber, said lower discharge port having a size larger than that of the upper discharge port.

3. An airbag system according to claim 2, wherein said gas generator has a rod shape having a gas port facing downwardly at one end thereof and disposed vertically in the housing chamber.

4. An airbag system according to claim 3, wherein said housing chamber is disposed between the upper chamber and the rear side rim of the airbag.

5. An airbag system according to claim 2, wherein said connecting line has a lower part situated close to the rear side rim of the airbag.

6. An airbag system according to claim 3, wherein said airbag is partitioned by said connecting line first section connecting the occupant side surface and the opposite side surface, said connecting line first section extending to said connecting line second section.

7. An airbag system according to claim 6, wherein said connecting line first section extends from a front side rim of the airbag to an end portion near the rear side rim, and said connecting line second section extends from said end portion of said connecting line first section upwardly to end near an upper side rim of the airbag.

8. An airbag system according to claim 7, further comprising a partitioning line disposed above said connecting line first

section so as to form a middle chamber between said upper chamber and said lower chamber.

9. An airbag system according to claim 1, wherein said first section separates the upper and lower chambers, and said second section separates gas distributor from the upper chamber.

Application No.: 10/690,748

Docket No.: D-1529

EVIDENCE APPENDIX

No copies of evidence are appended hereto.

RELATED PROCEEDINGS APPENDIX

No copies of decisions are appended hereto.